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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,110	01/14/2000	Faisal Haq	M-7998-US	7946

33031 7590 07/27/2004

CAMPBELL STEPHENSON ASCOLESE, LLP
4807 SPICEWOOD SPRINGS RD.
BLDG. 4, SUITE 201
AUSTIN, TX 78759

EXAMINER

DUONG, FRANK

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 07/27/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/483,110

Applicant(s)

HAQ ET AL

Examiner

Frank Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-5, 16-20 and 31-34 is/are rejected.
- 7) ☒ Claim(s) 5-16, 21-30 and 42-51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is a response to the amendment dated 05/10/04. Claims 1-51 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 16-20 and 31-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilford et al (USP 5,509,006) (hereinafter "Wilford").

Regarding **claims 1, 16 and 35**, in accordance with Wilford reference entirety, Wilford discloses a method/system/program product comprising:

step/means for receiving at least one packet (*Fig. 2; element 201 and col. 10, lines 64-65*); and

step/means for disposing of the receiving at least one packet in response to a walk (parse) of a Balance Hash Table of Access control List Binary Comparison Trees (*tree memory 308*), the Table (*tree memory 308*) encoding an Access Control List (*Fig. 2; element 206 and col. 16, lines 37-49*).

Regarding **claims 2, 17 and 38**, in addition to features recited in base claims 1, 16 and 35 (see rationales discussed above), Wilford further discloses (*Fig. 8 and col. 16, line 53 and thereafter*):

step/means for constructing a hash table index value from one or more bit positions, within the received at least one packet, pointed at by one or more pointers of a Has-Table-Balancing Bit Selection Vector (*Fig. 8; element 802 and col. 16, line 53 to col. 17, line 50*); and

step/means for walking a binary comparison tree associated with the constructed hash table index value (*col. 17, lines 45-50 and thereafter*).

Regarding **claim 3, 18 and 39**, in addition to features recited in base claims 2, 17 and 38 (see rationales discussed above), Wilford further discloses step/means for converting the Access Control List to the Balanced Hash Table of Access Control List Binary Comparison Tree, the Table encoding the Access Control List (*see Fig. 7C and col. 16, lines 46-49*).

Regarding **claim 4, 19 and 40**, in addition to features recited in base claims 3, 18 and 39 (see rationales discussed above), Wilford further discloses step/means for creating a binary comparison tree for at least one Access Control List Rule (Permission) in the Access Control List (*see Fig. 7c and col. 17, line 25-49*).

Regarding **claim 5, 20 and 41**, in addition to features recited in base claims 4, 19 and 40 (see rationales discussed above), Wilford further discloses step/means for creating at least one node, having at least one miss branch and at least one match branch, for at least one packet header field utilized by the at least one Access Control List Rule in the Access Control List (*see Figs. 7C-8 and col. 19, lines 1-12*).

Regarding claims **31-34 and 36-37**, in addition to features recited in base claims 16 and 35 (see rationales discussed above), Wilford further discloses the system of Fig.

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2 is a computer based system having memory (Fig. 2; element 203) corresponding to recordable media and network interface (Fig. 2; element 201) corresponding to transmission media.

Allowable Subject Matter

3. Claims 6-15, 21-30 and 42-51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed invention of base claims 1, 16 and 35 and further limits with the novel limitation of step/means for *"inserting at least a part of a binary comparison tree constructed for at least one Access Control List rule into a hash table entry pointed at by a hash table index"*, structurally and functionally interconnected with other limitations in the a manner as recited in the dependent claims 6-15, 21-30 and 42-45.

Response to Arguments

5. Applicant's arguments filed 5/10/04 have been fully considered but they are not persuasive. Applicants' arguments will be addressed hereinbelow in the order in which they appear in the response filed 5/10/04.

In the Remarks of the outstanding response, on page 15, pertaining the rejection under 35 USC § 102(b) of claims 1-5, 16-20 and 31-41, Applicants allege "*Applicants*

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have been unable to find a "balanced hash table" that stores "access control list binary comparison trees" in the cited portions of the reference. Accordingly, Applicants assert that the Examiner has not established a proper rejection against claim 1 under § 102(b)."

In response Examiner respectfully disagrees for the following rationales:

First, Examiner asserts the Office Action has clearly pointed out the claimed limitations corresponding to where they are taught in the prior art of Wilford et al reference.

Second, Examiner understands the Applicants are their own lexicographers. However, there is no specific definition for the disputed terms "*balanced hash table*" and "*access control list binary comparison trees*" in the claim. Thus, they are subjected to Examiner's broadest reasonable interpretation against the prior art of Wilford.

Third, a careful review the disputed claim Examiner finds no such language of "*balanced hash table that stores access control list binary comparison trees*" as alleged by the Applicants as a novel and unambiguous feature in the claims. Perhaps Applicants refer to certain features that are disclosed in the present application but not recited in the rejected claims in making the contention that the Wilford et al reference fails to show certain feature of Applicants' invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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In a response to this Office Action Applicants are strongly urged to clearly pointed out where the disputed limitation of "*balanced hash table that stores access control list binary comparison trees*" recited in the claim(s).

Fourth, the claims are drafted in a means/step plus function format. Perhaps in a response to this Office Action Applicants should invoke the 112, six paragraph to have the claimed limitations read as they are disclosed in the specification.

Examiner believes an earnest attempt has been made in addressing all of the Applicants' arguments. Due to the arguments are not persuasive, the rejection from the last Office Action is maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Frank Duong whose telephone number is (703) 308-5428. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frank Duong
Examiner
Art Unit 2666

July 25, 2004